

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

OXFORD.—Oxford at the beginning of Michaelmas Term, 1915, presents an unwonted appearance. The colleges are almost denuded of undergraduates; the river, playing grounds, and other usual resorts are comparatively deserted, and many of the accustomed activities are at a standstill. The city is redeemed from utter desolation by the presence of large numbers of young officers, who are sent here from their respective units to undergo a course of instruction by the staff of the Officers Training Corps, assisted by lecturers detailed from the War Office. Accommodation for this influx of the military element has been provided by several of the colleges, notably by Trinity, Wadham, Hertford, and Keble. The current number of the *University Gazette* contains a long list of members of the University who have given their lives for their King and country. Many of the scientific staff are being employed in researches and practical operations with direct reference to the war. Among these may be mentioned the names of Mr. R. B. Bourdillon, fellow of University, Mr. H. T. Tizard, fellow of Oriel, and Mr. I. O. Griffith, fellow of St. John's, who are all engaged in most important researches in the chemistry and physics of aerial warfare. Mr. Griffith has been specially re-elected to a fellowship in virtue of his research work in this department.

The new chemical laboratory, which is being erected under the supervision of Prof. Perkin, is rapidly approaching completion.

THE Swiney lectures on geology in connection with the British Museum (Natural History) will be delivered by Dr. J. D. Falconer, in the Lecture Theatre of the Victoria and Albert Museum, South Kensington, on Mondays, Tuesdays, and Saturdays, at 3 p.m., beginning Saturday, November 13. There will be twelve lectures, and their subject will be "Ice and the Ice Age." Admission to the lectures will be free.

A copy of the current calendar of University College, Dublin, a constituent college of the National University of Ireland, has been received. It contains detailed particulars of the various courses offered in preparation for the degrees conferred by the National University. Among such degrees we notice the bachelor of agricultural science, bachelor and master of engineering, bachelor and master of architecture, and bachelor and master of commerce. In addition to other scholarships and exhibitions, the governing body is prepared to award not more than five post-graduate scholarships in arts or science.

THE Departmental Committee appointed by Lord Selborne under the chairmanship of Sir Harry Verney, Bart., M.P., to consider what steps can be taken to promote the settlement or employment on the land in England and Wales of sailors and soldiers, whether disabled or otherwise, on discharge from the Navy or Army, has presented an interim report recommending that as an experiment fifty men who have been discharged from the Navy or Army owing to disablement should be given a course of training in an agricultural college, with the view of obtaining for them permanent employment on the land, and, in the case of those proving specially capable, fitting them to become occupiers of small holdings. This recommendation has been approved by Lord Selborne, and endorsed by the War Office, and the Treasury has agreed to place funds at the disposal of the Board of Agriculture and Fisheries to defray the cost of the experiment. It is proposed that the men selected shall be sent to the Harper Adams Agricultural College,

Newport, Salop, and to the College of Agriculture and Horticulture, Holmes Chapel, Cheshire, where they will be provided with board and lodging and be given a course of training in agriculture and horticulture free of charge to themselves. Any men who have been discharged from the Navy or Army on account of disablement, and desire to receive this course of training, should apply at once to the Secretary, Board of Agriculture and Fisheries, 4 Whitehall Place, S.W., for a form of application.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, October 11.—M. Ed. Perrier in the chair.—The President announced the deaths of Edouard Prillieux and Philippe Hatt, members of the academy.—L. **Lecornu**: The deformation of a cylindrical tube.—Henryk **Arctowski**: The solar faculæ. An account of a statistical study of Greenwich heliographic observations. From measurements of the areas of the spots and faculæ, the maximum for the latter is nine days behind the maximum for the spots. The author, from his researches on the Greenwich data, considers the phenomenon of the variation of the frequency of the sun-spots as being only a manifestation subordinate to the phenomenon of the variation of the faculæ.—Marcel **Brillouin**: Certain problems of mathematical physics in the case of hollow bodies.—Pierre **Lesage**: Salted plants and the transmission of acquired characters. Plants watered with salt water show differences, more or less marked, from plants of the same species watered with pure water. Starting with seeds of *Lepidium sativum* arising from plants watered with weak salt solutions in 1911, it is shown that some of the acquired characters are transmitted by the seeds, although the plants arising from the latter had been watered with soft water only.—E. **Demoussy**: The localisation of the acids and sugars in fruits. Various species of fruit, both ripe and partially ripe, were subjected to gradually increasing pressure, and the juices expressed collected in fractions and analysed separately. In some cases the amounts of acid and sugar vary considerably with the pressure. These variations are marked with apricots and grapes, small for peaches, and do not appear in strawberries and melons. The cause of this variation is discussed from the point of view of the osmotic pressures in the cells. The localisation of the dissolved matter in fruits is regarded as affording an explanation of the marked difference in the taste of certain fruits in the raw and cooked states.

BOOKS RECEIVED.

Continuous and Alternating Current Machinery Problems. By Prof. W. T. Ryan. Pp. 37. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 2s. 6d. net.

Practical Shop Mechanics and Mathematics. By J. F. Johnson. Pp. ix+130. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 4s. 6d. net.

Arithmetic for Carpenters and Builders. By Prof. R. B. Dale. Pp. ix+231. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 5s. 6d. net.

The Essentials of Descriptive Geometry. By Prof. F. G. Higbee. Pp. vi+204. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 7s. 9d. net.

Mortality Laws and Statistics. By R. Henderson. Pp. v+iii. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 5s. 6d. net.

A Manual for Health Officers. By J. S. McNutt. Pp. x+650. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 12s. 6d. net.

Market Gardening. By F. L. Yeaw. Pp. vi+102. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 3s. 6d. net.

How to Lay Out Suburban Home Grounds. By H. J. Kellaway. Second edition. Pp. x+134. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 8s. 6d. net.

An Introduction to the Mechanics of Fluids. By Prof. E. H. Barton. Pp. xiv+249. (London: Longmans and Co.) 6s. net.

The Star Pocket-Book: or How to Find Your Way at Night by the Stars. By R. Weatherhead. Pp. 92. (London: Longmans and Co.) 1s. net.

The Surrey Hills. By F. E. Green. Pp. x+252. (London: Chatto and Windus.) 7s. 6d. net.

New Zealand. Department of Mines. N.Z. Geological Survey. Palæontological Bulletin, No. 3: Revision of the Tertiary Mollusca of New Zealand, based on Type Material. By H. Suter. Part ii. Pp. 69. (Wellington: J. Mackay.)

New Zealand. Department of Lands and Survey. Report on the Survey Operations for the Year 1914-15. By E. H. Wilmot. Pp. 78. (Wellington: J. Mackay.)

Board of Agriculture and Fisheries. Annual Report of the Education Branch on the Distribution of Grants for Agricultural Education and Research in the Year 1914-15. Pp. x+154. (London: H.M.S.O.; Wyman and Sons, Ltd.) 8½d.

Transactions of the London Natural History Society for the Year 1914. Pp. 85. (London: L. Reeve and Co., Ltd.) 3s.

Hill Birds of Scotland. By S. Gordon. Pp. xii+300. (London: E. Arnold.) 12s. 6d. net.

Earth-Lays: Geological and other Moods. By C. Tolly. Pp. 63. (London: J. M. Dent and Sons, Ltd.) 3s. 6d. net.

The War and New British Industries. Imperial Institute Monographs. Oil Seeds and Feeding Cakes, with a Preface by Dr. W. R. Dunstan. Pp. xxv+112. (London: J. Murray.) 2s. 6d. net.

Old London's Spas, Baths, and Wells. By Dr. S. Sunderland. Pp. xii+169. (London: John Bale, Ltd.) 7s. 6d. net.

The British Coal-Tar Industry: its Origin, Development, and Decline. Edited by Prof. W. M. Gardner. Pp. ix+437. (London: Williams and Norgate.) 10s. 6d. net.

The Antiquity of Man. By Prof. A. Keith. Pp. xx+519. (London: Williams and Norgate.) 10s. 6d. net.

Manuals of Chemical Technology. IV.: Chlorine and Chlorine Products. By Dr. G. Martin. Pp. viii+100. (London: Crosby Lockwood and Son.) 7s. 6d. net.

Iowa Geological Survey. Vol. xxiii. Annual Report, 1912, with Accompanying Papers. Pp. xliii+662. (Des Moines: Iowa Geological Survey.)

Annual Report of the Board of Regents of the Smithsonian Institution for the Year ending June 30, 1914. Pp. xi+729. (Washington: Government Printing Office.)

Smithsonian Institution. U.S. National Museum. Bulletin 01: Report on the Turton Collection of South African Marine Mollusks, with additional notes on other South African Shells contained in the U.S. National Museum. By P. Bartsoh. Pp. xii+305. (Washington: Government Printing Office.)

NO. 2399, VOL. 96]

DIARY OF SOCIETIES.

THURSDAY, OCTOBER 21.

INSTITUTION OF MINING AND METALLURGY, at 8.15.—The Geology of the Waihi Grand Junction Mine: Report upon Developments up to June 30, 1914: A. Jarman.

FRIDAY, OCTOBER 22.

PHYSICAL SOCIETY, at 5.—The Radiation and Convection from a Heated Wire in an Enclosure of Air: Dr. T. Barratt.—The Determination, by the Method of Diffusive Convection, of the Coefficient of Diffusion of a Salt Dissolved in Water: Dr. A. Griffiths.—The Magnitude of the Thermal Resistance Introduced at the Slightly Conical Junction of Two Solids, and its Variation with the Nature of the Surfaces in Contact: Dr. T. Barratt.

MONDAY, OCTOBER 25.

MEDICAL SOCIETY, at 8.30.—Discussion: Gunshot Wounds of the Peripheral Nerves. The Medical Aspect: Dr. W. Harris; the Surgical: W. Trotter.

TUESDAY, OCTOBER 26.

ZOOLOGICAL SOCIETY, at 5.30.—(1) The Distribution of Secondary Sexual Characters amongst Birds, with Relation to their Liability to the Attack of Enemies; (2) Some Observations on Pattern-blending with Reference to Obliterative Shading and Concealment of Outline: J. C. Mottram.—Fauna of West Australia. III. A New Nemertean—*Geonemertes dendyi*, sp. n.—being the First Recorded Land Nemertean from Western Australia. IV. *Palæmonetes australis*, sp. n., being the First Record of the Genus in Australia: Prof. W. J. Dakin.—A Collection of Mammals from the Coast and Islands of S.E. Siam, with an Account of the Fruit-Bats by Dr. Knud Andersen: C. Boden Kloss.—Studies on the Protozoan Parasites of the Fishes of the Georgian Bay: Dr. J. W. Mayor.—(1) A List of the Snakes of East Africa, North of the Zambesi and South of the Soudan and Somaliland, and of Nyassaland; (2) A List of the Snakes of North-East Africa, from the Tropic to the Soudan and Somaliland, including Socotra: Dr. G. A. Boulenger.—Some Notes upon the Anatomy of *Rana tigrina*: Dr. G. E. Nicholls.

FRIDAY, OCTOBER 29.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Thomas Hawksley Lecture: The World's Sources of Fuel and Motive Power: Dr. Dugald Clerk.

CONTENTS.

PAGE

Science in National Affairs	195
Analytical Control of Modern Dyes. By G. T. M.	197
Rudimentary Science for Coal-Miners	198
Mathematical School-Books. By D. B. M.	199
Our Bookshelf	201
Letters to the Editor:—	
Rule for Determining Direction of Precessional Movement.—Prof. W. Watanabe; Prof. A. Gray, F.R.S.	202
The Meaning of "Chincough."—W. E. Hart	202
Fellowships for Industrial Research. By J. B. C.	202
Constructional Data of Small Telescope Objectives. By T. Smith and R. W. Cheshire	203
Jean-Henri Fabre	204
Notes	205
Our Astronomical Column:—	
Selenium Cell Photometry of δ Orionis	209
The Plane of the Solar Motion	209
Displacement of Photographic Stellar Images	209
The Solar Eclipse, August 21, 1914	209
Upper Air Temperatures. By W. H. Dines, F.R.S.	210
A Manx Tribute to Edward Forbes	210
Education and Industry. (With Diagram.) By Principal J. C. Maxwell Garnett	210
The British Association:—	
Section M.—Agriculture.—Opening Address by R. H. Rew, C.B., President of the Section	216
University and Educational Intelligence	221
Societies and Academies	221
Books Received	221
Diary of Societies	222

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